

STAR7, Jaroslav, dr.

Weather and aircraft. Letecky obzor 8 no.11:333-334 N '64.

STARY, Jaroslav, dr.

Special aircraft Travels 7-2 and Chrysler. letocky obzor 9 no.2:51  
F 165.

STARY, Jaroslav, dr.

Special aircraft. Letecky obzor 9 no.3:79 Mr '65.

STARY, Jaroslav, dr.

Special aircraft. Letecky obzor 9 no.4:106-107 Ap '65.

1. 1000-60

ACC NR: AP6013151

(A)

SOURCE CODE: CZ/0078/66/000/004/0010/0010

INVENTOR: Stary, Jaroslav (Engineer; Prague)

ORG: None

5 5  
B

TITLE: [A circuit for phase and frequency comparison] CZ Pat. No. PV 6912-64,  
Class 21a

SOURCE: Vynalezky, no. 4, 1966, 10

TOPIC TAGS: phase shift analysis, frequency shift, signal analysis, pulse signal, transistorized circuit

ABSTRACT: This patent introduces a circuit for comparing the phase and frequency of a signal with square synchronizing pulses with the same parameters of a second signal which has odd symmetry with differing active and retrace intervals. The input circuit of the comparator has two outputs. When the first signal is fed to the input, a square-wave signal is generated at each output in synchronization with the input signal and in opposition with the other output signal. A capacitor and diode are connected in series at the first output, while a second capacitor and diode are connected in the same way at the second output. The second signal for comparison is fed to the tie point between the interconnected series circuits. The output voltage is proportional to the frequency difference or phase shift between the two series circuits at the tie points between capacitor and diode. This resistor is shunted by an additional

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L 38838-66

ACC NR: AP6013151

capacitor. The input circuit consists of two transistors ( $T_1$  and  $T_2$ ) of opposing conductivity with emitters connected to opposite terminals (+U-U) of the voltage supply, and collectors connected to a neutral point (A). The first signal for comparison is fed through a capacitor ( $C_5$ ) to the base of the first transistor ( $T_1$ ). The base of the second transistor ( $T_2$ ) is connected through a capacitor ( $C_6$ ) to the tie point ( $A_4$ ) between two resistors ( $R_5$ ,  $R_6$ ) connected in series between the collector of the first transistor ( $T_1$ ) and a neutral point ( $A_0$ ). [Translation]

SUB CODE: 09/ SUBM DATE: 09Dec64

Card 2/2

STARY, Miroslav *J. of Am. Ch. Soc.*  
*I Feb. 1954*  
*glass*

PATENTS

✓ Device for drawing off artificial fibers from the spinneret, especially fibers spun from the molten mass. JOSEF ZMATLIK, MIROSLAV STARY, BOHUMIL PILER, AND JAN PINKAVA (Elite, Střezene továrny punčoch, národní podnik, and Zavody pre chemicku výrobu, národný podnik). U. S. 2,595,044, April 29, 1952. — Glass fibers are drawn by means of rollers located below the spinneret.

P R I

STARY, Miroslav, inz.

"Fibers in the future" by Zd.Travnicek. Reviewed by Miroslav  
Stary. Nova technika no.12:568-569 D '60.



SPITALNIK, Zdenek; STARY, Miloslav; BELSKY, Milan

Processing of fluorine exhalations from superphosphate plants.  
Chem prum 13 no.9:458-460 S '63.

1. Vyzkumny ustav anorganicke chemie, Usti nad Labem.

Neurology

CZECHOSLOVAKIA

UDC 616-009.7

STARY, O.; [Affiliation not given].

"Pain and the Problems of its Objective Assessment."

Prague, Casopis Lekaru Ceskych, Vol 105, No 43, 28 Oct 66, pp 1161 - 1164

Abstract: Centripetal transmission of pain excitation is described. The function of thin myelinated fibers A delta to epsilon and non-myelinated fibers C is discussed. The influence of the endocrine glands in the perception of pain is evaluated. Mechanism of pain reception in less developed animals is reviewed. Study which the author made of the reaction of the electrical resistance of the skin during painful excitation is discussed. Induction of hemi-cranial seizures by histamine injection in patients suffering from migraine is described. Author's study of nociceptive induction of painful vertebrogenic syndromes is reviewed. The importance of the condition of the higher nervous activity in the perception of pain is discussed. No references.

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STARY, O.

Significance of the Pavlovian theory in clinical neurology. Neur.  
psychiat. cesk. 14 no.2-4:51-57 Aug 51. (CML 21:5)

DRECHSLER, B.; LEWIT, K.; STARY, O.

Variation of localization of cortical motor function. Neur. psychiat.  
cesk. 15 no. 1-2:27-34 Apr 1952. (CJML 22:3)

1. Of the Neurological Clinic (Head--Prof. K. Henner, M. D.) of  
Charles University, Prague.

STARY, Oldrich, As.dr.

Pathogenesis of migraine according to Vvedenskii's and Pavlov's theories. Cas.lek.cesk. 91 no.43:1217-1220 24 Oct 52.

1. Z neurologické kliniky Karlovy university, Prednosta: prof. dr. Kamil Henner.

(MIGRAINE, etiology and pathogenesis,  
Pavlov's & Vvedenskii's theories)

STANY, O.

"The Second Polish Neurology Congress in Warsaw."

SO: Neurol. a psych., Prague, Vol. 16 (1953), No. 4, pp. 195-204.

STANI, O.

"Remarks on the Pathogenesis and Treatment of Disc Dislocation in the  
the Region of the Cervical Column."

30: Neurol. a psych., Prague, Vol. 16 (1953), No. 4, pp. 204-208.

STARY, Oldrich, MUDr

Problem of pain from reflexological view. Cesk. otolar. 3 no.4:  
153-158 Nov 54.

(PAIN, physiology

reflexol. aspect)

(REFLEX, CONDITIONED, in various diseases  
pain)



STARY, OLDRICH, DR.

STARY, Oldrich, Dr

Reflex vasomotor disorders in nociceptive radical irritation in discopathies. Neur. & psychiat. cesk. 17 no.3:179-186 Je '54.

1. Z neurologické kliniky Karlovy university v Praze, přednosta prof. Dr K. Henner.

(INTERVERTEBRAL DISKS, diseases,

\*reflex vasomotor disord. in nociceptive radical irritation in discopathies)

LEWIT, K., Dr.; STARY, O., dr.

Modifications of skin temperature following therapeutic interventions in diskogenic syndromes. Neur. & psychiat. cesk. 18 no.6:407-413 Nov 55.

1. Z neurologické kliniky Karlovy university v Praze, přednosta akademik K. Henner.

(BODY TEMPERATURE, in various diseases,  
intervertebral disk displacement, eff. of  
various ther. procedures on skin temperature. (Cz))  
(INTERVERTEBRAL DISK DISPLACEMENT, therapy  
eff. of various procedures on skin temperature. (Cz))

STARY, O.Dr.Doc.; DRECHSLER, B.Dr.; HLADKA, V., Dr.; NEVSIMAL, O.Dr.

Pathophysiology of the paravertebral muscles and of the acute discogenic syndroms. Cas. lek. cesk. 44 no.13:339-346 25 Mar 55.

1. Neurol. klin. K.U., predn. akademik K.Henner.
  - (INTERVETREBRAL DISC, diseases  
funct. lability of motoric analysor, diag. electromyographic  
exam. of paravertebral musc.)
  - (ELECTROMYOGRAPHY, in various diseases  
intervertebral disc dis., diag. by exam. of paravertebral  
musc.)
  - (MUSCLES  
paravertebral, electromyographic exam. in diag. of dis.  
of intervertebral disc)

KUNC, Zd., Doc., MUDr.; STARY, O., Doc., MUDr.; SETLIK, L., MUDr.

Results of the surgical treatment of intervertebral disk displacement in view of evaluation of work capacity. Cas. lek. cesk. 94 no.44:1186-1189 28 Oct 55.

1. Z chirurgickeho oddeleni UVN, Praha,--Z neurologicke kliniky Karlovy university, prednosta akademik K. Henner. Z neurologickeho oddel. UVN, Praha.

(INTERVERTEBRAL DISK DISPLACEMENT, surgery results, capacity to work.)

(WORK capacity, evaluation after surg. of intervertebral disk displacement.)

MIRATSKY, Zdenek, Dr.; STARY, Oldrich, doc., dr.; SOUKUPOVA, Marta

Further experiences with conditioned defense and proprioceptive reflexes in restoration of movement stereotypes in spastic paralysis. Cesk. neur. 19 no.4:221-233 Nov 56.

1. Universita Karlova, Neurologicka klinika, prednosta: akademik prof. K. Henner.

(PARALYSIS, therapy,  
conditioned defense & proprioceptive reflexes in  
restoration of movements in spastic cases (Cz))  
(REFLEX, CONDITIONED,  
defense & proprioceptive reflexes in restoration of  
movements in spastic paralysis (Cz))

STARY, O.  
BEDNAR, B., Doc. Dr.; DRECHSLER, B., Dr.; KARPISEK, J., Dr.; STARY, O., Doc. Dr.

Xanthomatous multiple neuritis with idiopathic hyperlipemia & mild diabetes. Cesk. neur. 20 no.5:324-334 Sept 57.

1. Hlavuv I. pathologickoanatomicky ustav KU, zastupce prednosty doc. Dr B. Bednar Neurologicka koinika KU, prednosta akademik K. Henner Statai sanatorium V Praze 16.

(DIABETES, MELLITUS, compl.

hyperlipemia with xanthomatous multiple neuritis (Cz))

(LIPIDS, in blood

excess. with diabetes mellitus & xanthomatous multiple neuritis (Cz))

(POLYNEURITIS, compl.

diabetes mellitus with hyperlipemia in xanthomatous multiple neuritis (Cz))

FIGAR, Stepan; STARY, Oldrich

Results of polyrheographic examination of disturbances in sensory afferentation. Cesk. neur. 21 no.6:382-392 Nov 58.

1. Laborator grafickych vysetrovacich metod CSAV Praha, prednosta akademik Vilem Laufberger Neurologicka klinika Karlovy university, prednosta akademik Kamil Henner.

(INTERVERTEBRAL DISK DISPLACEMENT, physiol.

electrical skin resist. reaction after section of sensitive nerve roots (Cz))

(REFLEX, PSYCHOGALVANIC

electrical skin resist. reaction after section of sensitive spinal nerve roots in intervertebral disk displacement (Cz))

(NERVES, SPINAL, physiol.  
same)

STARY, O.; OBRDA, K.

Current concepts in treatment of discopathy. Cas. lek. cesk. 97 no. 18:  
561-568 2 May 58.

1. Neurologická klinika KU v Praze, přednosta akademik K. Henner.  
O. S. Praha 2, Katerinska 30.

(INTERVERTEBRAL DISK DISPLACEMENT, ther.  
(Cz))



STARY, O.

Electroencephalography in conditioning. Cas. lek. cesk. 97 no.38:207-  
214 19 Sept 58.

(REFLEX, CONDITIONED

EEG (Cz))

(ELECTROENCEPHALOGRAPHY,

in conditioned reflexes (Cz))

MIRATCKY, Zdenek; STARY, Oldrich

Significance of formation of conditioned proprioceptive reflexes  
in the restoration of motor functions in hemiplegic patients.  
Cesk. neur. 22 no.6:349-357 N'59.

1. Neurologická klinika KU v Praze, prednosta akademik Kamil  
Henner.

(HEMIPLAGIE physiol.)  
(REFLEX CONDITIONED)

MIRATSKY, Z.; OBRDA, K.; BZRAKOVÁ, M.; CHODURA, R.; STARY, O.

Significance of cervical reflexes in the re-education of hemiplegic patients. Cesk. neur. 22 no.6:358-366 N '59.

1. Neurologická klinika KU v Praze, přednosta akademik Kamil Henner.

(HEMIPLEGIA rehab.)

(NECK physiol.)

MIRATSKY, Z.; STARY, O.

The importance of conditioned proprioceptive reflexes for the recovery of motor function in hemiplegics. Rev.Czech.M. 6 no.2: 85-93 1960.

1. Neurological Clinic, Charles University, Prague, Director:  
Academician K. Henner.

(REFLEX CONDITIONED)

(HEMIPLEGIA physiol)

MACEK, Z.; STARY, O.

15 Years of neurology in the Czechoslovak People's Republic. Cesk.  
neur. 23 no.3:147-151 Mr '60.  
(NEUROLOGY)

STARY, O.; MIRZHATSKIY, Z.; BERANKOVA, M.

Use of reflexes in the restoration of movements in hemiplegia.  
Report no.1: Conditioned defense reflexes. Zhur.nevr.i psikh.  
60 no.1:9-17 '60. (MIRA 13:6)

1. Nevrologicheskaya klinika (zav. - akademik Kamil Genner)  
Karlova universiteta, Praga.  
(REFLEX CONDITIONED)  
(HEMIPLEGIA ther.)

MIRZHATSKIY, Z.; STARYY, O.; BERANKOVA, M.

Experience with the application of reflexes in the restoration of movements in hemiplegia. Report No.2: Tendinous and periosteal reflexes. Zhur.nevr.i psikh 60 no.8:953-956 '60. (MIRA 13:9)

1. Nevrologicheskaya klinika (zaveduyushchiy - akademik K.Genner)  
Karlova universiteta, Praga.  
(PARALYSIS) (REFLEXES)

MIRATSKY, Zdenek; OBRDA, Karel; STARY, Oldrich

Reflex therapy of spastic paralysis. Cas. lek. cesk.99 no.17:  
520-527 22 Ap '60.

1. Neurologická klinika KU v Praze, přednosta akademik prof. dr.  
Kamil Henner.

(PARALYSIS SPASTIC ther.)  
(REFLEXOTHERAPY)



STARY, Oldrich; VYMAZAL, Josef; PROCHAZKOVA, Zdena, labor spoluprace VONKOVA,  
Jirina

Study of histaminopexy in disseminated sclerosis. Cesk. neur. 24  
no.6:361-370 N '61.

1. Neurologicka klinika KU v Praze, prednosta akademik Kamil Henner.

(MULTIPLE SCLEROSIS blood) (HISTAMINE blood)

CZECHOSLOVAKIA

O. STARY, K. OBRDA, J. PFEIFFER and M. BERANKOVA, Neurologic Clinic of Faculty of General Medicine (Neurologicka klinika fakulty vseobecneho lekarstvi); Head Academician K. HENNER, Charles University, Prague.

"Polyelectromyographic Study of Disturbances of Proprioceptive Analysis in Incipient Discopathies in Children."

Prague, Ceskoslovenska Neurologie, Vol 26, No 2, 1963; pp 81-87.

Abstract [English summary modified]: Polyelectromyographic study of 8 muscle groups in each of 30 grammar school children, along with complete clinical examination. There were functional disturbances of the spine noted in 20: slight scoliosis, sacro-iliac displacements and similar early defects. These were mostly accompanied by asymmetric electromyographic patterns, with a statistically significant degree of correlation between the 2 criteria. Four electromyograms, 4 graphs; 4 Czech and 6 Western references.

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CZECHOSLOVAKIA

Q. STARY, S. FIGAR, M. TUHACEK, D. KREJCI, V. HLADKA and J. VYMAZAL,  
Neurologic Clinic of the Faculty of General Medicine of Charles  
University (Neurologicka klinika fakulty vseobecneho lekarstvi KU  
[Karlove Universita],) Head (prednosta) Academician K. HENNER; and  
Physiology Institute of the Czechoslovak Academy of Sciences (Fyziologicky  
ustav CSAV [Ceskoslovenska akademie vied],) Chief (reditel) Prof Dr  
Z. SERVIT; Prague.

"Acupuncture in Discogenic Radicular Affections and Polyrheographic  
Reactions of Involved Segments."

Prague, Ceskoslovenska Neurologie, Vol 26, No 2, 1963; pp 104-111.

Abstract [English summary modified]: An attempt to evaluate scientifically  
acupuncture whose "undeniable" successes (especially in trigeminal neuralgia  
and discopathies) one of the authors saw during a recent study trip in Red  
China; 42 patients with discogenic radicular syndromes involving primarily  
L5 and S1 were treated with an average of 3 applications on the points  
prescribed by traditional Chinese medicine; clinical evaluation of results  
was supplemented by polyrheographic and skin temperature change

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Prague, Ceskoslovenska Neurologie, Vol 26, No 2, 1963; pp 104-111.

recordings during and after as well as before treatment. Clinically results excellent in 12, good in 18, no change in 10. Electrical skin resistance changes during and after treatment were recorded in 23: in 5, paradoxical increase, in 9 no change, in 9 decrease, concomitant with clinical improvement. Skin temperature changes did appear in 16 out of 17 so observed. Authors conclude that effect on the vasomotor reflexes is undeniable but it is only one of the factors involved in acupuncture. Four Soviet, 1 Western, 8 Czech (including thesis by author S.F.) ref's. Also 6 Graphs and 2 tables.

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FIGAR,S.; STARY,O.; HLADKA,V.

Changes in vasomotor reflexes in painful vertebrogenic syndromes. Cesk. neurol. 26 no.6:353-360 N'63.

1. Fyziologicky ustav CSAV v Praze (reditel prof. dr. Z.Servit, DrSc., a Neurologicka klinika fakulty vseobecneho lekarstvi KU v Praze (prednosta akad. K.Henner).

\*

STARY, O.

Principles of research on the vertebrogenic syndrome in the  
Czechoslovakian SSR. Cesk. neurol. 27 no.4:209-213 J1'64

1. Neurologicka klinika fakulty vseobecneho lekarstvi KU  
[Karlovy university] v Praze; prednosta: akademik K. Henner.

STARY, O.; FIGAR, S.; ANDELOVA, E.; HLADKA, V.; JANSKY, M.; KALVODOVA, E.

Analysis of disorders of vasomotor reactions in lumbosacral syndromes. Cesk. neurol. 27 no.4:214-218 J1'64

1. Neurologicka klinika fakulty vseobecneho lekarstvi KU [Karlovy university] v Praze (prednosta: akademik K. Hanner) a Fyziologicky ustav CSAV [Ceskoslovenske akademie ved] v Praze (reditel: prof. dr. Z. Servit).

STARY, O.; OEDRA, K.; PFEIFFER, J.; BERANKOVA.

Polyelectromyographic examination of disorders of proprioceptive analysis in the initial stages of vertebrogenic disease in children. Cesk. neurol. 27 no.4:219-223 JI'64

1. Neurologicka klinika fakulty vseobecneho lekarstvi KU  
[Karlovy university] v Praze; prednosta: akademik K. Henner.



FIGAR, M.; STANEY, S.; HROCKA, V.

Changes in vasomotor reflexes in painful vertebrogenic syndromes.  
Rev. Czech. med. 10 no.4:238-246 '64.

1. Institute of Physiology, Czechoslovak Academy of Sciences,  
Prague (Director: Prof. Z. Servit, M.D., DSc.) and Department  
of Neurology, Faculty of General Medicine, Charles University,  
Prague (Director: Academician K. Henner).

MIRATSKY, Z.; SUSSOVA, J.; STARY, O.

Electroencephalographic analysis of the origin and dication of conditioned pain reflexes in lumbar disk lesions. Cesk. neurol. 27 no.4:260-263 J1'64

1. Neurologicka klinika fakulty vseobecneho lekarstvi KU (Karlov university) v Praze (prednost: akademik K. Henner) a Fyziologicky ustav CSAV [Ceskoslovenske akademie ved] v Praze (reditel: prof. dr. Z. Servit).

FIGAR, S.; STARY, O.

Stimulus modality and inverse vascular responses. *Activ. nerv. sup.* (Praha) 7 no.2:188-189 '65

1. Institute of Physiology, Czechoslovak Academy of Sciences and Department of Neurology, Charles University, Prague. 2. S.Figar's address: Praha 2, Katerinska 30.

L 12842-66 EWT(1)/EWA(j)/EWA(b)-2 RO

ACC NR: AP6005711

SOURCE CODE: CZ/0082/65/000/003/0213/0219

AUTHOR: <sup>44,55</sup> Stary, O.; <sup>44,55</sup> Figar, S.

ORG: Neurological Clinic, Faculty of General Medicine, Charles University, Prague  
(Neurologická klinika fakulty všeobecného lékařství KU); Physiological Institute,  
Czechoslovak Academy of Sciences, Prague (Fyziologický ústav CSAV) <sup>44,55</sup> 33 B

TITLE: Mediator and higher nervous mechanisms in vasomotor reactions in vertebrogenic lesions

SOURCE: Československá neurologie, no. 3, 1965, 213-219

TOPIC TAGS: neurology, reflex activity, clinical medicine

ABSTRACT:

Plethysmographic studies of vasomotor reflexes in 98 lumbosacral and 58 cervical lesions are described. The reaction depends on the intensity of the pain suffered. The mediator mechanism of the inverse vasomotor reactions and its localization are discussed. It appears that they have a cholinergic mechanism. Quality of stimulation is decisive in inverse vasodilator reactions and in their blocking by atropine. It appears that the higher nervous centers and not the peripheral vasomotor synapse are responsible for inverse vasomotor reactions. Orig. art. has: 4 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 021 / OTH REF: 013

SOV REF: 003

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L 12943-66

ACC NR: AP6005678

SOURCE CODE: CZ/0079/65/007/002/0188/0189

AUTHOR: Figar, S.; Stary, O.

ORG: Institute of Physiology, Czechoslovak Academy of Sciences; Department of Neurology, Charles University, Prague

TITLE: Stimulus modality and inverse vascular responses [This paper was presented at the Third Interdisciplinary Conference on Experimental and Clinical Study of Higher Nervous Functions held in Mariánské Lázně from 19 to 23 October 1964.]

SOURCE: Activitas nervosa superior, v. 7, no. 2, 1965, 188-189

TOPIC TAGS: drug effect, man, blood circulation, neurology, nervous system drug

ABSTRACT: Influence of the quality of the stimulus on inverse, vasodilator responses in painful vertebrogenic syndromes was studied. 55 healthy subjects and 25 patients with an algetic reticular syndrome were tested for the vascular responses elicited by standard stimuli. In healthy subjects, vasodilator response occurred in 10.9 to 16.1% in algetic patients. An atropine injection changed the inverse vasodilator response to normal vasoconstriction to nociceptive and sound stimuli in 96 and 72%, respectively. In inverse vasomotor responses important part is played by higher nervous activity components. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1 HW

STARY, P.

Fauna of aphid parasites (Hymenoptera, Aphididae) of the  
southern Crimea. Ent. oboz. 41 no.4:875-877 '62.  
(MIRA 16:1)

1. Institut biologii Chekhoslovatskoy Akademii nauk, Praga.

(Crimea—Parasites—Plant lice)

STARY, Petr

The generic classification of the family Aphidiidae (Hymenoptera).  
Cas entom 57 no.3:238-252 '60. (EEAI 10:1)

1. Institute of Entomology, Czechoslovak Academy of Science, Prague.  
(Plant lice) (Hymenoptera)

STARY, Petr, C.Sc.

Two new species of *Praon* Haliday from Czechoslovakia (Hym., Aphididae).  
Cas entom 58 no.4:340-343 '61.

1. Czechoslovak Academy of Sciences, Institute of Entomology, Praha  
2, Vinicna 7.

(Hymenoptera)



STARÝ, Petr, CSc.

Biological control of *Megoura viciae* Bekt. in Czechoslovakia. Cas  
entom 61 no.4:301-322 O '54.

1. Institute of Entomology of the Czechoslovak Academy of  
Sciences, Prague 2, Vinicna 7. Submitted October 5, 1963.

STARY, Petr, kandidat biologicheskikh nauk Vinichna (Vinicna)7, Praga)

Aphid fauna of honey plants as a source of subsidiary hosts of  
aphid wasps (Hymenoptera, Aphididae) Cas entom 59 no.1:42-58 '62

1. Chokhoslovatskaia Akademia Nauk, Institut Entomologii, Praga.

STARY, S., inz.

Wasting water is expensive. Vodni hosp 13 no.5:196 '63.

15.8110 2209, 1372, 1407

21282  
G/004/61/008/004/001/003  
B120/B206

AUTHORS: Leziva, J. M., Lidařík, M., and Starý, S.

TITLE: Effect of structure of various polyphenols on the properties of epoxy resins

PERIODICAL: Plaste und Kautschuk, v. 8, no. 4, 1961, 171-174

TEXT: The effect of structure of the phenolic component on the properties of epoxy resins of medium molecular weight was studied. Preparation of the phenolic component: The bisphenols (2)-(9) in Table 1 were prepared by condensation of the corresponding ketone and aldehyde, respectively, with phenol or o-cresol at a molar ratio 1:1.78 in the presence of 72.5% H<sub>2</sub>SO<sub>4</sub> and a small amount of toluene and thioglycolic acid at 40°C; (12) by melting 62 g of 2-methyl-4-tert-butyl-6-methylol phenol with 105 g of 2-methyl-4-tert-butyl phenol, addition of 5 g of HCl concentrate at 90°C, heating to 120°C for one hour, distilling off in vacuum of the nonreacted 2-methyl-4-tert-butyl phenol, rinsing of the residue with petroleum ether, and recrystallizing from gasoline; (13) by melting 42 g of 4-tert-butyl-2,6-dimethyl phenol with 280 g of 4-tert-butyl phenol, addition of 7 ml of HCl concentrate, slow

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G/004/61/008/004/001/003  
B120/B206

Effect of structure ...

solidifying under stirring and cooling, distilling off the nonreacted 4-tert-butyl phenol through water vapor distillation, and double recrystallizing of the residue from ethanol. Preparation of epoxy resins: To a mixture of 1 mole of bisphenol, 1.33 moles of epichlorohydrin and dioxane (30%, related to bisphenol), 1.40 moles of NaOH (in 30% solution) was added dropwise at 70°C in the course of 2 hr, then kept for 2 hr at 75°C, and then the mixture butanol - xylene (1:3) was added in the same proportion by weight as the original bisphenol. In the bisphenols (2) and (11) (see Table 1) dioxane had to be used as solvent, in (1) the part insoluble in butanol - xylene was dissolved by addition of dioxane. Two layers formed which were separated, the resin solution was cooled, neutralized with CO<sub>2</sub>, dehydrated by azeotropic distillation, filtered, and the solvent was finally removed at 170°C in vacuum. The resins from bisphenols (6) and (10) were dried by means of silica gel. Properties of epoxy resins as dependent on the structure of the phenolic component: see Table 2. Explanations: Column 9: the cementing was hardened at 180°C for 2 hr, and the properties were rated according to Lidarik, M., Plaste und Kautschuk, v. 7 (1960), p. 55. Column 12: test of the produced epoxy resins for their suitability as stoving lacquers. These were produced according to Swiss patent 257115 of the Ciba AG (August 30,

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Effect of structure ...

G/004/61/008/004/001/003  
B120/B206

1949). Stoving lacquers made from the very easily accessible 2,2-bis(4-hydroxy-3-methyl-phenyl)-propane of good yield show unsatisfactory properties, even after combination with a resin from dimerized fatty acids and triethylene amine. Casting resins from 2,2-bis(4-hydroxy-3-methyl-phenyl)-propane, hardened with phthalic anhydride, show insufficient strength properties as compared with those from 2,2-bis(4-hydroxy-phenyl)-propane (the values of resins made from 2,2-bis(4-hydroxy-phenyl)-propane are in parentheses): tensile strength 147 (460-510) kg/cm<sup>2</sup>, flexural strength 541 (700-810) kg/cm<sup>2</sup>, impact flexural strength 5 (16-24) kg/cm<sup>2</sup>; the resistance to heat according to Vicat is about equal: 116(115)°C; the electric insulation properties are inferior: dielectric constant 4.58(3.66), loss factor at 800 cycles, 0.069(0.0011), resistivity 10<sup>15</sup>(10<sup>16</sup>)Ω·cm. Table 3 shows the measured values for the deformation test according to Höppler after hardening the resins with phthalic anhydride (one molecule for 2 epoxy groups). Preparation of test pieces: the resin was heated to 120°C, the phthalic anhydride was stirred in for 10-15 min, the mass was then poured into the mold, and the test pieces (cylinder: 11.5 cm diameter, 8 cm height) were dried at 120°C for 17 hr. Conclusions: The epoxy resin properties strongly depend on the structure of the initial polyphenols. 2,2-bis(4-hydroxy-phenyl)-propane produces resins of universal applicability. Resins of special properties

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Effect of structure ...

G/004/61/008/004/001/003  
B120/B206

can be produced by using other polyphenols. There are 6 tables and 25 references: 3 Soviet-bloc and 22 non-Soviet-bloc. The three most recent references to English-language publications read as follows: W. Erich and M. J. Bodmar, Appl. Polymer Sci., v. 3(1960), p. 296. O. Stephenson, Soc. v.1954, p. 1571. W. E. Clair, Brit. P. 799629 (February 4, 1957), Union Carbide Corp., Swiss. P. 341002 (April 2, 1955).

ASSOCIATION: Forschungsinstitut für synthetische Harze und Lacke, Pardubice (ČSSR)(Research Institute of Synthetic Resins and Lacquers. Pardubice, Czechoslovakia)

Legends to the Tables: Table 1: (a) raw materials used, (b) melting point, °C, (c) determined, (d) according to publications, (e) trinuclear novolak from p-tert-butyl phenol. Table 2: Properties of produced epoxy resins: (1) polyphenol, (2) analysis, (3) content of epoxy groups, (4) chlorine content, (5) melting point, (6) solubility in (7) toluene, (8) mineral spirit, (9) properties of the glue with dicyano diamide, (10) tensile shearing strength, (11) resistance to heat according to Vicat, (12) lacquer film properties (hardened for 60 min at 180°C), (13) on glass, (14) on sheet steel, (15) hardness, measured by pendulum tester according to Persoz, (16) aspect, (17) thickness of layer, (18) flexibility test according to Erichsen, (19) Carl 4/8

S/061/63/000/001/057/061  
B144/B186

AUTHORS: Lidarík, Miloslav, Dufek, Jan, Starý, Stanislav, Smrčka,  
Jindřich

TITLE: Production of epoxy resins

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1963, 539, abstract  
1T130 (Czechosl. patent 100282, July 15, 1961)

TEXT: Epoxy resins are obtained when epihalohydrin and its derivatives react in the presence of a Friedel-Crafts catalyst with mono- and poly-atomic phenols, alcohols, bisphenols, or phenol resins, and the resultant mixture of halohydrin ethers of phenol compounds (or the mixture of separately prepared halohydrin ethers) and alcohol is dehydrohalogenated in high-alkaline medium. By way of example, 1 mole diene and 10 moles ethyl chlorohydrin are mixed in a flask and heated under stirring to 70°C. 1% triethanol amine (related to diene) and 3% NaCl in 15% aqueous solution are added. The mixture is heated to boiling and then left for 4 hrs. Then, 0.12 mole glycerin-tris-chlorohydrin ether is introduced, which has been prepared by reaction of 3 moles ethyl chlorohydrin and 1 mole

Card 1/2



Production of epoxy resins

S/081/63/000/001/057/061  
E144/B186

glycerin with  $\text{BF}_3$  catalyst by heating to  $65-75^\circ\text{C}$  for 3 hrs. To the mixture of chlorohydrin ethers, 2.36 moles NaOH in the form of 20% aqueous solution is added dropwise within 3 hr 45 min and left for 15 min. Then, 300 g benzene is added, the aqueous layer is separated and the resin solution is neutralized with  $\text{CO}_2$  to pH 6.5. The solution is dried with calcined soda and filtered, and the transparent filtrate is separated from the ethyl chlorohydrin excess by low-pressure distillation. [Abstracter's note: Complete translation.]

Card 2/2

LIDARZHIK, M. [Lidarik, M.]; STARY, S.; MLEZIVA, Y.

Cationic polymerization of glycidol ethers. Vysokom.sosd. 5  
no.11:1738-1747 N '63. (MIRA 17:1)

1. Nauchno-issledovatel'skiy institut sinteticheskikh smol i lakov,  
Chekhoslovakiya.

LIDARZHIV, M.; STARY, S.; MLEZIVA, Y.

Anionic polymerization of glycidol ethers. Vysokom.sped. 5 no.11:  
1748-1753 N '63. (MIRA 17:1)

1. Nauchno-issledovatel'skiy institut sinteticheskikh smol i lakov,  
Chekhoslovakiya.

LIDARIK, Miloslav, inz. OSc.; STARY, Stanislav

New types of epoxy casting resins. Elektrotechnik 19 no.5:  
140-143 My '64.

1. Research Institute of Synthetic Resins and Lacquers, Pardubice.

EDUARD, Miloslav; STARY, Stanislav; NEMIVA, Josef

Ionic polymerization of glycidyl ethers. *Chem Zvesti* 14  
no.10:521-525 O '64.

1. Research Institute of Synthetic Resins and Lacquers,  
Jardubice.

ACC NR: AP6031836

(A)

SOURCE CODE: CZ/0009/66/000/007/0414/0420

AUTHOR: Lidarik, Miloslav; Stary, Stanislav; Tamchyna, Jiri

ORG: Research Institute for Synthetic Resins and Lacquers, Pardubice (Vyzkumny ustav syntetickych pryskyric a laku)

TITLE: Ion exchange polymerization catalysts for manufacturing epoxy resins

SOURCE: Chemicky prumysl, no. 7, 1966, 414-420

TOPIC TAGS: catalytic polymerization, ion, epoxide, epoxy resin, (10A)  
EXCHANGE

ABSTRACT: This article discusses the practical uses of ion exchange polymerization catalysts for the manufacture of epoxy resins and is a supplement to and a continuation in depth of a treatment of the subject which appeared in previous publications. The results obtained so far from the investigation of the ion exchange polymerization of epoxy resins carried out at the Research Institute for Synthetic Resins and Lacquers at Pardubice are surveyed, and it is pointed out that the overall increased importance of epoxy resins, in particular their increased applications in the electrical industry, is due to the possibility of hardening them by ionization polymerization. They are suitable for use in cast resins, in insoluble lacquers, impregnation resins, in glues,

Cord 1/2

UDC: 66.095.264; 679.576; 679.5:621.3

ACC NR: AP6031836

in surfaces toatings, etc. The development of catalysts for this type of hardening has still not been completed, but the progress made so far in improving the qualities of epoxy resins indicates that there is real hope for further improvement. Orig. art. has: 1 figure and 20 tables.

SUB CODE: 07, 11/ SUBM DATE: none/ ORIG REF: 004/ SOV REF: 002/ OTH REF: 003

Card 2/2

ACC NR: AP6031836

(A)

SOURCE CODE: CZ/0009/66/000/007/0414/0420

AUTHOR: Lidarik, Miloslav; Stary, Stanislav; Tamchyna, Jiri

ORG: Research Institute for Synthetic Resins and Lacquers, Pardubice (Vyzkumny ustav syntetickych pryskyric a laku)

TITLE: Ion exchange polymerization catalysts for manufacturing epoxy resins

SOURCE: Chemicky prumysl, no. 7, 1966, 414-420

TOPIC TAGS: catalytic polymerization, ion, epoxide, epoxy resin, (10A)  
EXCHANGE

ABSTRACT: This article discusses the practical uses of ion exchange polymerization catalysts for the manufacture of epoxy resins and is a supplement to and a continuation in depth of a treatment of the subject which appeared in previous publications. The results obtained so far from the investigation of the ion exchange polymerization of epoxy resins carried out at the Research Institute for Synthetic Resins and Lacquers at Pardubice are surveyed, and it is pointed out that the overall increased importance of epoxy resins, in particular their increased applications in the electrical industry, is due to the possibility of hardening them by ionization polymerization. They are suitable for use in cast resins, in insoluble lacquers, impregnation resins, in glues,

Card 1/2

UDC: 66.095.264; 679.576; 679.5:621.3



ACC NR: AP6031836

in surfaces toatings, etc. The development of catalysts for this type of hardening has still not been completed, but the progress made so far in improving the qualities of epoxy resins indicates that there is real hope for further improvement. Orig. art. has: 1 figure and 20 tables.

SUB CODE: 07, 11/ SUBM DATE: none/ ORIG REF: 004/ SOV REF: 002/ OTH REF: 003

Card 2/2

STARY, V.

Operational reserve funds of a collective farm.  
p. 20.  
ROLINICKE HLASY. (Ministerstvo zemedelstvi.  
Hlavni aprava jednotnych zemedelskych druzstev)  
Praha.  
Vol. 10, no. 6, June 1956.

SCURCE: EEAL LC Vol. 5, No. 10, Oct. 1956

STARY, V.

STARY, V. The final draft for the control of work and work units. p. 19.  
Prefabricated structures in agriculture. p. 20.

Vol. 10, no. 12, Dec. 1956  
ROLNICKÉ HLASY  
AGRICULTURE  
Czechoslovakia

So: East European Accession, Vol. 6, no. 5, May 1957

STARY, V.

Establishing an accounting system on new collective farms; order in financial matters and control as a means of making members content.

p. 15 (ROLNICKÉ HLASY) Vol. 11, no. 11, Nov. 1957,  
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,  
March 1958

STARY, V.

Assembly of the T03-B prototype dwelling house of slag-concrete storey-high blocks.  
p. 240

POZEMNI STAVBY. (Ministerstvo stavebnictvi) Praha, Czechoslovakia, Vol. (7),  
no. 5, (May) 1959.

Monthly List of East European Accessions (EEAI), LV, Vol. 8, no. 7, July 1959  
Uncl.

STARY, V.

Employees of machine-tractor stations help to improve bookkeeping and economic analyses on collective farms. p. 198.

MECHANISACE ZEMEDLSTVI. (Ministerstvo zemedelstvi a lesniho hospodarstvi) Praha, Czechoslovakia, Vol. 8, no. 9, Sept. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959  
Uncl.

STARY, V.

Experiences with the wage system for tractor operators on collective farms.  
p. 199.

MECHANISACE ZEMEDELSTVI. (Ministerstvo zemedelstvi a lesniho hospodarstvi) Praha,  
Czechoslovakia, Vol. 9, no. 9, Sept. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959  
Uncl.

STARY, Z.

(5)

Changes in the composition of serum proteins in pregnancy. Z. Stary, R. Turska, O. Tezok, and R. Cindl (Univ. Bratislava). *Hoppe-Seyler's Z. physiol. Chem.* 288, 55-61 (1951).—The individual serum protein fractions contain prosthetic carbohydrate groups. The hexose (I) and acetylglucosamine (II) units which make up the carbohydrate portion can be detd. by pptg. the protein, hydrolyzing, and detg. I and II concns. in the hydrolyzate. Normally serum contains 170-200 mg. polysaccharide per 100 cc., of which  $\frac{2}{3}$  is I and  $\frac{1}{3}$  is II. Serum protein-bound carbohydrate is also much greater than free serum glucose. In the last trimester of pregnancy protein-bound carbohydrate increases markedly although serum protein concn. is diminished. Serum protein-bound carbohydrate consists of 2 separate types: (a) glycoprotein which by salt fractionation is found in the albumin portion and (b) the globulin portion contg. 4.5% carbohydrate. In pregnancy the serum protein carbohydrate rise occurs in the albumin fraction and is double the normal value, while the albumin fraction itself is somewhat diminished. No significant alteration occurs in the globulin carbohydrate fraction. Bernard Klein



STARY-Z.

MD

✓6349. Retarded movement of carbohydrate-containing proteins of serum in paper electrophoresis. Z. Stary and A. Ugur *Klin. Wochschr.*, 1955, 33, 766-767 (Biochem. Inst., Univ. Istanbul, Turkey).—Serum mucoids when added to normal serum and subjected to electrophoresis in the Tiselius apparatus appear as a double humped zone in the albumin fraction, but when examined by paper electrophoresis a single-humped zone appears in the  $\alpha$ -globulin fraction only. (German)

G. W. CAMBRIDGE.

FRIC, Viktor; DOHNALEK, Jarmil; STARY, Zdenek, inz.

Magnetron 60 SA 51 for industrial use. Sbor vak elektrotech  
3:36-51 '61.

1. Vyzkumny ustav pro valuvou elektrotechniku, Praha.

FRIC, Viktor; STARY, Zdenek, inz.

Contribution to the design of magnetron output transformers.  
Sbor vak elektrotech 3:62-73 '61.

STARY, Zdenek, inz.

Tasks of the water resource management in 1963. Vodni hosp 13  
no.4:121-122 '63.

1. Ministerstvo zemedelstvi, lesniho a vodniho hospodarstvi.

Small, dark, cylindrical, composed of thin, dense, brownish-black, granular material, with a smooth surface, and a slightly irregular base.

Yacht; HAWK, Overboard

Control of railroad operations in a coalfield district. Bel 40  
Tech 13 no.1:Suppl:1-6 1945.

1. Head of the Unit Operations, Isti nad labem (for Smadl).
2. Director of the Hov. a Bohemian Lignite District (for Ausberger).
3. Head of Transportation Service of the Doly Vitezneho underground National Enterprise (for Stary).
4. Director of the Doly V. a. J. National Enterprise, Komorany (for Zeman).
5. Head of Transportation Service of the Coal Preparation Plant, Komorany (for Brodsky).
6. Chief of the Most Railroad Junction (for Siki).

STARYGIN, N.

Starygin, N. - "Preparation of seed for sowing," Doklady 2-y Resp. Agroteldn. konf-tsii  
Mariysk ASSR, Kormolen'yansk, 1948, p. 155-73

SO: U-3600, 15 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949).

<p>ca</p> <p>12</p> <p>Role of lactic acid bacilli in Dutch cheese. O. Voitkevich and L. Stannigstein: <i>Microbiologia</i> 2, 72-80 (1933).—It is customary to use a pure culture of lactic acid streptococci when Dutch cheese is prepd. from pasteurized milk. Cheese made from fresh, unpasteurized milk invariably contains, besides streptococci, large nos. of lactic acid bacilli. The present investigation proves that these bacilli actually assist in the ripening process, by breaking down the primary protein hydrolytic products into amino acids. Excellent results were obtained in the prepn. of cheese from pasteurized milk by inoculation with a mixed culture of lactic acid streptococci and bacilli (<i>Streptococcus lactis</i> and <i>Lactobacillus casei</i>), isolated from Dutch cheese.</p> <p>H. Cohen</p>																									
<p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									
<p>RECORD #1</p>													<p>RECORD #2</p>												
<p>RECORD #3</p>													<p>RECORD #4</p>												

STARYGINA (Mme L. P.), GOLDIN (M. I.), LYAGINA (Mme N. M.), &  
TRYASUNOVA (Mme T. I.). *Mulberry bacteriosis*. — *Musposbust.*  
[*Microbiol.*], ix, pp. 282-294, 1940. [Russian, with English sum-  
mary. Abs. in *Chem. Abstr.*, xxxv, 11, p. 3681, 1941.]

The various strains of *Bacterium* [*Pseudomonas*] *mori* isolated from  
samples of mulberry leaves from the Ukraine, Crimea, and other  
regions of the U.S.S.R. [see preceding abstract] were found to be  
identical in their morphology, physiology, and agglutinative action,  
and to correspond with the description of the organism given by  
[E. F.] Smith (*Science*, N.S., xxxi, p. 792, 1910). Cultures of *P. mori*  
remain stable and retain their virulence at a temperature range of  
0° to 30° C. for a lengthy period, which is curtailed by warmer con-  
ditions or desiccation. Infection is not seed-borne, but may overwinter  
in diseased foliage in the soil and spread during the next growing season.

*Inst. Agric. Micro., Moscow*



STARYGINA, L. P.

STARYGINA, L. P., nad SHISHELOVA, N. A. "Bacteriosis of Cabbage (Black Rot of Cabbage Seedlings, *Bacterium campestre*)," Doklady Vsesoiuznoi Akademii Sel'skokhoz-  
iaistvennykh Nauk imeni V. I. Lenina, vol. 12, no. 5, 1947, pp. 27-29. 20 Ak1

STARUGINA (ММЕ L. P.) & SHISHELOVA (ММЕ N. A.). Возбудители мягкой гнили семенников Капуста. [Agents of soft rot in Cabbage grown for seed.]—*Микробиология* [*Microbiology*], 17, 2, pp. 160-170, 1 pl., 1948. [Received June, 1949.]

The results of experiments carried out at the Moscow Department of the Pan-Union Institute for Agricultural Microbiology demonstrated that most of the bacteria causing soft rot in cabbage were pathogenic in varying degrees to potato tubers, carrot roots, and cabbage and potato seedlings. When grown on nutrient medium the cultures were characterized by the instability of their morphological-cultural characters (shape of colonies and cells, colour, and growth) besides the differences in pathogenicity. Many agreed with the causal organism of black leg [*Erwinia phytophthora*: *R.A.M.*, 27, p. 119], isolated from a potato stem, but the majority can be tentatively referred to as *Bacterium carotovorus* [*E. carotovora*: *ibid.*, 28, p. 306].

1464

RUDAKOV (K. I.), STARUGINA (Mme. L. P.), & SHISHKOVA (Mme. N. A.). МЯКАН  
ГНИЛЬ ОВОЩЕЙ. [Soft rot of vegetables.] Докл. Акад. Сельхозн. Наук  
Ленина [Rep. Lenin Acad. agric. Sci.], 1950, 10, pp. 25-28, 1950.

In the cabbage-growing regions of central U.S.S.R. the plants and especially the  
seeds are attacked by soft rot due to *Kirvinia curatovora* [R.A.M., 28, p. 555],  
which is difficult to control, and to *Bacillus mearnericus*, *B. subtilis*, and especi-  
ally *B. polymyxa* [cf. ibid., 29, p. 85]. The latter group causes rot only at tempera-  
tures over 35° C. and of the aerial parts only; they are infected from the soil by  
the contact of the lower leaves or by insects. The most effective measures for  
controlling rot by the latter group are the lowering of the temperature of the soil  
and preventing its contact with the lower leaves as well as avoiding unfavourable  
conditions of nutrition, removing the lower leaves of year-old cabbage, and the  
destruction of cabbage insects.

STARYGINA, L. P.

USSR/Biology, Agricultural - Plant Diseases Jan/Feb 52

"Bac. Polymyxa as a Causative Factor of Soft Rot  
[Myagkaya Gnii]," L. P. Starygina, Moscow Branch,  
All-Union Inst of Agr Microbiol

"Mikrobiologiya" Vol XXI, No 1, pp 52-59

Cultures of Bac. polymyxa closely resemble those of  
Erw. carotovora both morphologically and in regard to  
culture characteristics. The process of spore forma-  
tion exhibits great variability in Bac. polymyxa. This  
microorganism causes the same damage (soft rot) in  
potato tubers, cabbage stumps, and green plants as Erw.  
carotovora, but at a higher temp than the latter.

223T1

STARYGINA, L.P.

F-1

USSR / Microbiology. General Microbiology

Abs Jour : Ref Zhur - Biol., No 2, 1958, No 5062

Author : Starygina, L.P., Oksent'yan, U.G.

Inst : Not given

Title : Characteristics of Smooth (S) and Folded (R) Forms of  
Ps. Fluorescens Liquefaciens.

Orig Pub : Mikrobiologiya, 1956, 25, No 5, 529-532

Abstract : It has been shown that R forms of Ps. fluorescens lique-  
faciens differ in their chemical properties (curdling and  
peptonization of milk, liquefaction of gelatin, fermentation  
of sucrose) from the S forms by somewhat higher activity.  
R forms are also characterized by greater antibiotic acti-  
vity in relation to Bacillus subtilis and B. pumilus and

Card : 1/2

STARÝGINA, L. P.

Antibiotic activity of *Pseudomonas fluorescens liquefaciens*. L. P. Starýgina (All-Union Sci. Research Inst. Agr. Microbiol., Moscow). *Mikrobiologiya* 25, 700-5 (1956).— Cultures of *P. fluorescens liquefaciens* from infected kok-saghyz roots were tested against *Escherichia coli*, *Bacillus subtilis*, *B. pumilus*, *Aerobacter aerogenes*, *Sarcina*, *Saccharomyces cerevisiae*, *Rhizobium meliloti*, *R. trifolii*, and *Erwinia carotovora* in solid mediums with various carbohydrates and with glycerol. There was some antibiotic activity against all these organisms, and even against the S and R forms of *P. fluorescens liquefaciens* itself, but no characteristic differences which could be used for distinguishing between varieties or strains. Julian F. Smith

1957  
PLANT DISEASES, Diseases of cultivated plants.

ABST. 3000: Sov. Agr. Biol. Zh., 2, 1959, No. 6599

Author : Starozhin, L.P.; Seichelova, N.A.

INT. : --  
TITLE : Soft Rot in Vegetable Crops and Control Measures.

ORIG. PUB.: Izv. Vsesoyuzn. Nauch. Inform. po s.-kh. mikrobiol., 1957, No. 3, 24-26

ABSTRACT : It has been ascertained by the authors that soft rot can be caused, besides by Erwinia carotovora, by soil saprophytes as well: (Pseudomonas fluorescens, Rac. polymyxa, Bac. mesentericus, Bac. pumilus, and others). These bacteria were discovered within the tissues of outwardly healthy plants. In distinction to Erwinia carotovora the proteoglycanase bacilli are widely distributed in soils and are constantly found in plant remains. In

CARD : 1/3





STAROGINA, L.P.

SO(1)

AUTHORS:

Afrikan, E. K., Kuchayeva, A. G., Candidates of Biological Sciences

TITLE:

Use of Antibiotics in Plant Cultivation (Primeneniye antibiotikov v rasteniyevodstve)

PERIODICAL:

Vestnik Akademii nauk SSSR, 1959, No. 1, pp 142-143 (USSR)

ABSTRACT:

A conference dealing with this subject took place in Yerevan from 10-13 October, 1958; it had been called by the Institute of Microbiology and Virology (Virologicheskiy Institut) of the Academy of Sciences (Akademiya Nauk) of the USSR. The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan.

The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan.

Card 2/4

Card 3/4

The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan. The Institute of Microbiology and Virology is situated in the city of Yerevan.

BEREZOVA, Ye.; BORODULINA, Yu.; BUSHUYEVA, P.; GEL'TSER, F.; GOLIKOV, V.;  
DOROSINSKIY, L.; KOZLOVA, N.; KRAKHIN, P.; KRUGLOV, N.; LAZAREV, N.;  
LAMPOVSHCHIKOV, P.; MAKAROVA, M.; MARKOVA, Z.; NESTEROVA, Ye.;  
PROKHOROV, M.; SOROKINA, T.; STARYGINA, L.; KHUDYAKOV, Ya.

Ivan Il'ich Samoilov; obituary. Mikrobiologiya 28 no.2:318-  
319 Mr-Apr '59. (MIRA 12:5)

(SAMOILOV, IL'IA IL'ICH, 1900-1958)

IZRAIL'SKIY, V.P., prof.; doktor biolog.nauk; SHUSTOVA, L.N., kand.med.  
nauk; GOHLENKO, M.V., doktor biolog.nauk; MURAV'YEV, V.P.;  
BEREZOVA, Ye.F., doktor biolog.nauk; SUDAKOVA, L.V., mikrobiolog;  
GRUSHEVOY, S.Ye., doktor sel'skokhoz.nauk; NEMLIYENKO, F.Ye.,  
doktor biolog.nauk; BEL'TYUKOVA, K.I., doktor biolog.nauk; STARYGINA,  
L.P., kand.biolog.nauk; PERSHINA, Z.G., kand.biolog.nauk; ART'YEM'YEVA,  
Z.S., mikrobiolog; NOVIKOVA, N.S., kand.biolog.nauk; OSNITSKAYA, Ye.A.,  
fitopatolog; YASHNOVA, N.V., fitopatolog-mikrobiolog; MIKZABEK'YAN,  
R.O., kand.biolog.nauk; TETYUREVA, I.V., red.; PEVZNER, V.I., tekhn.red.

[Bacterial diseases of plants] Bakterial'nye bolezni rastenii. Izd.2.,  
perer. i dop. Moskva, Gos.izd-vo selkhoz.lit-ry, 1960. 467 p.  
(MIRA 13:7)

1. Chlen-korrespondent Ukrainskoy AN (for Murav'yev).  
(Bacteria, Phytopathogenic) (Plant diseases)

STARYGINA, L.P.; BIRKEL', M.R.

Indices of the effectiveness of antibiotics used against gummosis  
in cotton. Trudy Vses. inst. sel'khoz. mikrobiol. 17:5-17 '60.

(MIRA 15:3)

(Antibiotics) (Gummosis) (Cotton--Diseases and pests)

STARYGINA, L.P.; BIRKEL', M.R.; SAFAROV, Sh.A.

Antibiotics in the control of gummosis in cotton. Trudy Vses. inst.  
sel'khoz. mikrobiol. 17:60-67 '60. (MIRA 15:3)  
(Cotton--Diseases and pests) (Gummosis) (Antibiotics)

L 23255-66 EWT(m)/EWP(t) IJP(s) JD

ACC NR: AP6009066

SOURCE CODE: UR/0185/66/011/003/0265/0270

AUTHOR: Staryk, P. M. (Starik, P. M.)

ORG: Chernovtsy State University (Chernivets'ky derzhuniversytet)

TITLE: Electrical properties of PbTe with bismuth impurities

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 3, 1966, 265-270

TOPIC TAGS: lead compound, telluride, electric conductivity, Hall constant, electron mobility, hole mobility, Hall mobility, carrier density, activation energy, valence band

ABSTRACT: The electrical properties of single crystals of PbTe alloyed with bismuth are investigated. The crystals were grown by the Bridgman method. Introduction of  $\sim 10^{19}$  atoms/cm<sup>3</sup> of bismuth resulted in n-type conductivity with a carrier density of about  $10^{19}$  cm<sup>-3</sup>. At lower bismuth concentrations the lower portion of the crystals has p-type and the upper portion n-type conductivity. Similar results were obtained with zone refining, indicating that the bismuth distribution was nonuniform. In samples cut from the same crystal, the bismuth content may have increased on approaching the n-type region. The electrical conductivity and Hall coefficient of eight samples were measured by standard dc methods. Measurements were also made using PbTe samples with impurity levels produced by bismuth

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and donor levels produced by excess lead. The hole density in all n-type PbTe samples with bismuth impurities was of the order of  $3 \times 10^{18} \text{ cm}^{-3}$  regardless of the bismuth concentration. The Hall mobility and its temperature dependence was the same as for unalloyed crystals. A slight increase in the Hall coefficient and a rather considerable decrease in the Hall mobility were noted in crystals cut out near the p-n junction. Upon annealing, the conductivity of p-type samples decreased, the Hall coefficient in the impurity region increased, and the inversion temperature shifted to lower values. The Hall mobility increased with decreasing temperature like  $T^{-2.6}$ . In some samples prolonged annealing at 165C results in a change from p-type to n-type conductivity. It is found that alloying of PbTe with bismuth produces both shallow donor levels with activation energy  $\Delta E = 0$  and comparatively deep acceptor levels at  $\Delta E = 0.065 \text{ eV}$  above the valence band. Annealing at 160C leads to a decrease in the concentration of deep acceptor levels. The author thanks Candidate of Phys.-Math Sciences, K. D. Tovstyuk, and the senior scientist P. I. Voronyuk for assistance with the work and valuable advice. Orig. art. has: 5 figures and 4 formulas.

SUB CODE: 20/ SUBM DATE: 28Dec64/ ORIG REF: 002/ OTH REF: 002

Card 2/2 946

STARYKH, A.M.; KOVAL', V.O.

Manufacture of particle board made by extrusion compression  
from aspen pulp. Der. prom. 14 no.12:20-22 D '65.  
(MIRA 18:12)



YEGOROV, I.I.; TSERANIN, A.I.; DUDKOVA, G.V.; SPARYKH, I.F.

Some problems in the diagnostic use of radioisotopes, Cr <sup>51</sup> in  
the determination of gastrointestinal hemorrhage and <sup>51</sup>Cr labeled  
rosé bengal in liver function tests. Vest. AMN SSSR. 18 no.10:  
70-76 '83. (MIRA 17:6)

1. Centralnyy institut upravleniya vrachey Ministerstva  
zdravookhraneniya SSSR.

STARYKH, L.A., inzh.

Theory of the operation of automatic, electric towing winches. Sud. sil.  
ust no.2:122-138 '63. (MIRA 17:1)

L. Leningradskoye vyssheye inzhenernoye morskoye uchilishche im. admirala  
Molotova.

STARYKH, N. A.

127-12-26/28

AUTHORS: Voroshilov, O.V., Chief Geologist of the Temir-Tau mine, and  
Starykh, N.A., Senior Engineer

TITLE: "Drilling of Blasting Holes by Pneumatic Drills" by A.L.  
Skornyakov (A.L. Skornyakov, Prokhodka vzryvnykh skvazhin  
pnevmodarnikami)

PERIODICAL: Gornyy Zhurnal, 1957, No 12, p 71 (USSR)

ABSTRACT: This note is a review of the book published by the Metal-  
lurgizdat in 1957. The reviewer points out that the book  
under discussion takes up many essential problems which thus  
far were elucidated in literature only in the form of in-  
dividual disconnected data. The author succeeded in uniting  
the results of recent years in drilling deep bore holes for  
blast operations by means of various pneumatic drills and  
machines. Some defects and inaccuracies of the book are also  
pointed out.

ASSOCIATION: Temir-Tau mine (rudnik Temir-Tau)

AVAILABLE: Library of Congress

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YEL'TSOV, A.V.; CHIGAREV, A.G.; STARYKH, N.T.

N-aralkyl derivatives of phenylpyrrolidines. Zhur. ob. khim. 34  
no.10:3344-3351 O '64. (MIRA 17:11)

1. Institut toksikologii Ministerstva zdravookhraneniya SSSR,  
Leningrad.